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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER
VANDERVEGT, F

ART UNIT	PAPER NUMBER
1644	

DATE MAILED: 06/08/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/963,368

Applicant(s)
Nolan

Examiner
F. Pierre VanderVegt

Group Art Unit
1644



☒ Responsive to communication(s) filed on Nov 3, 1997

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), ~~or thirty days, whichever is longer~~, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 16-22 ~~is~~/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

☒ Claim(s) 16-22 ~~is~~/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All ☐ Some* ☐ None ☐ of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

This application is a divisional of application S.N. 08/789,333, which is a divisional of application S.N. 08/589,108, which is a divisional of application S.N. 08/589,911.

Claims 1-15 have been canceled.

5 Claims 16-22 are currently pending in this application.

Claim Rejections - 35 U.S.C. § 112

1. Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as
10 the invention.

 Claims 17-20 are drawn to the limitation "[a] molecular library of retroviruses according to claim 21" in line 1. There is insufficient antecedent basis for this limitation in the claim because claim 21 is drawn to a "cellular library of mammalian cells." Further, claims cannot be dependent upon a higher numbered claim, unless the claim and dependency have been introduced by
15 amendment.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

20 A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the Applicant for a patent.

25 (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the Applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the Applicant for patent.

2. Claims 16-22 are rejected under 35 U.S.C. 102(a, e) as being anticipated by U.S. Patent No. 5,639,595 to Mirabelli et al (A on form PTO-1449).

The '595 patent teaches a library of vectors which contains random oligonucleotides contained a population of 2.7×10^8 sequences (column 15, lines 11-24 in particular), which comprises at least 10^8 different nucleic acids. The '595 patent further teaches transfected mammalian cells with the library incorporated into the genome as evidenced by surface expression of proteins encoded by the library sequences (column 15, lines 40-55 in particular). The prior art teaching anticipates the claimed invention.

3. Claims 16-18 and 21-22 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Kitamura et al (1 on form PTO-1449).

The Kitamura et al reference teaches a library of vectors which contains random oligonucleotides contained a population of 1×10^6 sequences (Table 1 in particular). Kitamura et al further teaches transfected mammalian cells with the library incorporated into the genome as evidenced by the ability to select cells from the library based upon flow cytometric selection of cells which express the desired products on the cell surface (Figures 3 and 4 in particular). The prior art teaching clearly anticipates the claimed invention.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al (1).

Kitamura et al has been discussed supra. Kitamura et al does not teach libraries which express greater than 10^6 different random nucleotides, however the skilled artisan would have

expected an equal degree of success in constructing retroviral libraries comprising at least 10^7 or 10^8 oligonucleotide sequences. It would have been prima facie obvious to a person of ordinary skill in the art at the time the invention was made to construct libraries larger than the 10^6 random sequence library taught by Kitamura et al with a reasonable expectation of success. One would
5 have been motivated to construct a larger library based upon the diversity of the genome of the source material for the library and the rarity of the product for which the artisan is seeking to identify.

Conclusion

10 6. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which Applicant may become aware in the specification.

15 7. Effective February 7, 1998, the Group and Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1644.

20 8. Papers related to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. Papers should be faxed to Group 1640 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The fax phone number for official documents to be entered into the record for Art Unit 1644 is (703)305-3014. *Communications which are not to be entered into the record, such as proposed amendments, should be clearly marked "DRAFT" and faxed to (703)305-7401.*

25 Any inquiry concerning this communication or earlier communications from the Examiner should be directed to F. Pierre VanderVegt, whose telephone number is (703)305-6997. The Examiner can normally be reached Monday through Friday from 8:00 am to 4:30 pm ET. A message may be left on the Examiner's voice mail service. If attempts to reach the Examiner by

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telephone are unsuccessful, the Examiner's supervisor, Ms. Christina Chan can be reached at (703)308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist, whose telephone number is (703)308-0196.

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June 5, 1998
F. Pierre VanderVegt, Ph.D.
Patent Examiner
Art Unit 1644

David A. Saunders
DAVID SAUNDERS
PRIMARY EXAMINER
ART UNIT ~~182~~ 1644